

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/624,399	07/21/2003	Vladimir Mordekhay		6811	
7	590 02/28/2006		EXAM	INER	
VALENTIN BALTER			GORDON, BRIAN R		
C/O V. MORD			ART UNIT	PAPER NUMBER	
1045 LASSEN				PAPER NUMBER	
MENLO PARI	CA 94025		1743		
			DATE MAILED: 02/28/200	6	

Please find below and/or attached an Office communication concerning this application or proceeding.

			L 1.			
	Application No.	Applicant(s)	D			
	10/624,399	MORDEKHAY, VLADIM	IIR			
Office Action Summary	Examiner	Art Unit				
	Brian R. Gordon	1743				
The MAILING DATE of this communicatio Period for Reply	n appears on the cover sheet wit	th the correspondence address	·			
A SHORTENED STATUTORY PERIOD FOR R THE MAILING DATE OF THIS COMMUNICATI  - Extensions of time may be available under the provisions of 37 C after SIX (6) MONTHS from the mailing date of this communicatic  - If the period for reply specified above is less than thirty (30) days,  - If NO period for reply is specified above, the maximum statutory p  - Failure to reply within the set or extended period for reply will, by Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	ION.  CFR 1.136(a). In no event, however, may a reson.  Graphy within the statutory minimum of thirty period will apply and will expire SIX (6) MONTY statute, cause the application to become ABA	eply be timely filed  y (30) days will be considered timely.  THS from the mailing date of this community  ANDONED (35 U.S.C. § 133).	ication.			
Status						
1) Responsive to communication(s) filed on						
•	This action is non-final.					
3) Since this application is in condition for all		•	its is			
closed in accordance with the practice un	der Ex parte Quayle, 1935 C.D.	. 11, 453 O.G. 213.				
Disposition of Claims						
4) Claim(s) <u>17,19,20,23-26,29 and 31-33</u> is/s						
4a) Of the above claim(s) is/are wit	hdrawn from consideration.					
5) Claim(s) is/are allowed.						
6) Claim(s) <u>17 and 31-33</u> is/are rejected.						
7) Claim(s) 19, 20, 23-26, 29 is/are object 8) Claim(s) are subject to restriction a						
8) Claim(s) are subject to restriction a	ind/or election requirement.					
Application Papers						
•	The specification is objected to by the Examiner.					
	10)⊠ The drawing(s) filed on <u>21 July 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.					
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
_	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the	ne Examiner. Note the attached	Office Action or form PTO-15	2.			
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for for a) All b) Some * c) None of:  1. Certified copies of the priority docur 2. Certified copies of the priority docur 3. Copies of the certified copies of the application from the International But	ments have been received. ments have been received in Ap e priority documents have been r ureau (PCT Rule 17.2(a)).	pplication No received in this National Stage	<b>3</b>			
* See the attached detailed Office action for a	* See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)						
Notice of References Cited (PTO-892)	4) Interview St	ummary (PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-946	8) Paper No(s)	)/Mail Date  formal Patent Application (PTO-152)				
<ul> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/S Paper No(s)/Mail Date</li> </ul>	6) Other:					

Application/Control Number: 10/624,399 Page 2

Art Unit: 1743

#### **DETAILED ACTION**

### Response to Arguments

1. Applicant's arguments filed December 19, 2005 have been fully considered but they are not persuasive. Claims 17-27, 29, and 31-33 were previously rejected and indicated as allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Which also means that any 112 issues directed to the base and intervening claims must be remedied in the rewritten claim. In response applicant has amended/rewritten claim 17 to independent from, but has failed to include all of the limitations of the original claim 17 and the limitations of the base claim 9 and intervening claims 10-11. The new amended claim 17 is a combination of canceled claims 9 and 11, only. Claim 17 does not incorporate the limitations of original claim 17 (previously objected to) and claims 9-11. Hence the previous rejection applicable to claim 11 is also proper for rejecting the amended claim 17.

In view of the amendment the previous 112 rejections of claims 10 and 15 are hereby withdrawn.

In view of the cancellation of claims 9, 28, and 30, the previous 102 rejections of those claims are hereby withdrawn.

### Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

## Claim Rejections - 35 USC § 112

Page 3

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 17 and 31-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear if applicant if intends to claim the sample medium carrier handling means and information input/output stations as elements of the invention of claim 17, while both elements are mentioned the elements are not positively claimed.

Claim 17 recites the limitation "said information input/output station" in the first line of the last paragraph. There is insufficient antecedent basis for this limitation in the claim.

Claims 32-33 are directed to the sample medium. The sample medium has not been positively claimed in none of the previous claims. In order for the claims to be considered further limiting the sample medium must be previously claimed as an element of the invention. Furthermore claim 33, depends upon a canceled claim.

Claim 10 recites the handling means is "grippers" or "a storage cassette". If the grippers were chosen those claims directed to the storage cassette would not be further limiting. Therefore a reference teaching the grippers would also apply to those following claims directed to the storage cassette is not a definite requirement of the claim.

Claim 31 recites "a groups consisting of an electronic smart chip device and a cylindrical body with at least one flat side and a cylindrical side wall..." t is unclear if

Art Unit: 1743

applicant intends for both the chip device and cylindrical body to further comprise a flat side and side wall as claimed. For the purpose of examination, the examiner assumes the flat side and side wall are characteristics of the cylindrical body. Therefore a reference meeting the limitation of the chip device would also meet the limitation of subsequent claims directed to the cylindrical body which is not a definite requirement of the claim.

### Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.
  - 2. Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 7. Claims 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Frazier US 6,726,820 in view of Ganz et al. US 6,637,473.

Frazier discloses microdevices (plurality of sample medium carriers), such as those used in the pharmaceutical and biotechnological fields, including an integrated memory. According to various embodiments, the integrated memory is readable,

Art Unit: 1743

writable, and rewritable. The present invention further provides processing stations, e.g., for carrying out electrophoresis, pcr, genetic analysis, sample preparation, and/or sample cleanup, etc., that are capable of reading from and/or writing/rewriting to such memory.

As seen in Figure 1, a microdevice 10 comprises a substrate (or body, sample plate) 12 in which sample chambers 14 and channels 16 are formed (e.g., microfabricated), with a chamber or reservoir provided in fluid communication with each end of each channel.

The memory region 18 (electronic smart chip) of a microdevice 10 can be configured so as to be insertable into a reader-writer unit 22 (carrier body with complementary engagement means). The reader-writer unit 22 can be adapted for communication with a computing device (central processing unit), such as shown at 24. via a USB or FireWire connection 26. The memory can be written to before, during and/or after processing.

The processing station 28 can include integrated computing capabilities 32 programmed for receiving and processing data (alternatively, or in addition, the station 28 can be operably linked to an external computing device, such as a Macintosh or PC, and/or to a display-capable input-output device). In the illustrated embodiment, a human interface device is provided comprising an externally accessible keypad input/output unit with an LCD display, shown at 38. A variety of information, such as results or output generated from use of the station, can then be written to the integrated memory 18 of the microdevice 10. If desired, the microdevice can be transported to another computer,

Art Unit: 1743

computing-capable processing station, or other desired location, where the stored information can be accessed, etc. Certain embodiments contemplate storing the microdevice in a safe place, so as to archive information held in the integrated memory.

Frazier et al. does not disclose grippers or a storage cassette.

Ganz et al. disclose a device and method for the automated storage and retrieval of trays holding subject matter. A plurality of trays is inserted into an access device. A computer system is programmed to control a storage gantry to move the trays between the access device, a storage rack (cassette) and a work cell gantry. The computer system is also programmed to control the work cell gantry to move the subject matter to and from an automated receiving machine.

The device comprises a gripper for transporting micro-well plates from the storage rack to the work cell gantry.

It would have been obvious to one of ordinary skill in the art a the time of the invention to modify the invention of Frazier et al by employing the robotic grippers of Ganz et al. in order to automatically move the microdevices from a storage rack to the work station in order to reduce the amount of manual interaction required.

### Allowable Subject Matter

8. Claims 19-20, 23-26, and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and to overcome the 112 second paragraph rejections directed thereto.

Application/Control Number: 10/624,399 Page 7

Art Unit: 1743

9. The following is a statement of reasons for the indication of allowable subject matter: See previous office action.

#### Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian R. Gordon whose telephone number is 571-272-1258. The examiner can normally be reached on M-F, with 2nd and 4th F off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/624,399

Art Unit: 1743

Page 8

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

brg